

REMARKS

Applicants respectfully request reconsideration of the present application. No new matter has been added to the present application. Claims 1, 2, 5-16, 18-24, and 26-46 have been rejected in the Office Action. Claims 1, 12, 24, 36, and 41 have been amended, no new claims have been added, and no claims have been canceled in this Amendment. Accordingly, claims 1, 2, 5-16, 18-24, and 26-46 are pending herein. Claims 1, 2, 5-16, 18-24, and 26-46 are believed to be in condition for allowance and such favorable action is respectfully requested.

Rejections based on 35 U.S.C. § 102

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdeggal Brothers v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the . . . claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 2 USPQ 2d 1913, 1920 (Fed. Cir. 1989). *See also*, MPEP § 2131.

Claims 1, 2, 5-7, 9-12, 14, 16, 18-24, 26-30, 32-36, 38, and 40-46 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0038392 by De La Huerga (“De La Huerga”). As De La Huerga fails to describe, either expressly or inherently, each and every element recited in the claims, Applicants respectfully traverse this rejection, as hereinafter set forth.

Referring initially to independent claims 1 and 24, the claims recite features directed to allowing a caregiver to use a portable information device to access tasks assigned to that caregiver from a central information system. The central information system includes a central database for storing a variety of healthcare related information including patient records

for a plurality of patients and caregiver data/records for a plurality of caregivers. The caregiver data/record for a given caregiver includes a number of tasks that are currently assigned to that caregiver. In accordance with the embodiments of claims 1 and 24, a caregiver identification device includes a caregiver identifier for identifying a caregiver, and a central information system includes caregiver data/record that includes tasks assigned to the caregiver. The central information system may associate the assigned tasks for the caregiver with the caregiver identifier for that caregiver. *See, e.g., Specification*, ¶ [0039] and FIG. 4. Accordingly, the caregiver may use a portable information device to retrieve a caregiver identifier from a caregiver identification device and communicate the caregiver identifier to a central information system to access the caregiver's assigned tasks from the central information system. *See, e.g., id.*, ¶¶ [0039], [0042], [0043], [0064], and FIG. 12.

For instance, claim 1 recites “a central information system including a central database containing patient records for a plurality of patients, task-related information for at least a portion of the plurality of patients, and caregiver data for a plurality of caregivers, wherein the caregiver data for each caregiver includes one or more tasks assigned to that caregiver.” Claim 1 also recites “a caregiver identification device including a caregiver identifier associating a caregiver to caregiver data for the caregiver in the central information system, the caregiver data for the caregiver including assigned tasks for the caregiver.” Claim 1 further recites “a portable information device for collecting data from . . . the caregiver identification device and for communicating with the central information system to access . . . the caregiver data for the caregiver including the assigned tasks for the caregiver.”

Claim 24 recites a “central information system includes a central database containing: (1) a plurality of patient records for a plurality of patients, and (2) a plurality of caregiver records for a plurality of caregivers, wherein each caregiver record corresponds with a particular caregiver and includes one or more tasks assigned to that particular caregiver.” Additionally, claim 24 recites “receiving current patient related information from the central information system at the portable information device, the current patient related information including one or more tasks assigned to the caregiver as defined by the caregiver record for the caregiver contained in the central database of the central information system.”

In contrast to the inventions of claims 1 and 24, De La Huerga fails to describe allowing a caregiver to access, on a portable information device, information regarding tasks assigned to that caregiver that are stored at a central information system. Instead, De La Huerga discusses a method and apparatus for controlling IV delivery and monitoring. *See, e.g., De La Huerga, Abstract.* The system in De La Huerga includes a patient identification device that stores patient information; a physician identification device that stores physician information, and an information tag on an IV bag that includes delivery instructions. *See, e.g., id., Abstract; ¶¶ [0030], [0091], [0099], and [0107].* Patient information is read from the patient identification device and delivery instructions are read from the tag on the IV bag. *See, e.g., id., Abstract, ¶ [0030].* The patient information may be compared against the delivery instructions for verification purposes. *See, e.g., id., Abstract, ¶¶ [0030], [0031].* Additionally, the delivery instructions may be communicated to an IV pump to control operation of the pump. *See, e.g., id., Abstract, ¶¶ [0030], [0032].*

As discussed in the Background of the present application, the system in De La Huerga is not centrally managed and therefore does not allow caregivers to access real-time tasks

from a central information system. In some embodiments of De La Huerger, a remote server and database may be used for verifying medication orders. *See, e.g., id.*, ¶¶ [0043], [0243], [0253]-[0259]. However, using a remote server and database to verify a medication is intended to be administered to a patient as discussed in De La Huerger is different than allowing a caregiver to proactively access real-time tasks assigned to that caregiver. De La Huerger does not discuss a central information system as recited in claims 1 and 24 that includes a plurality of patient records for a plurality of patients and caregiver data/records for a plurality of caregivers that include tasks assigned to each caregiver. De La Huerger does not indicate that such a remote server/database includes caregiver data/records including tasks assigned to each clinician nor does De La Huerger discuss transferring task information for a given caregiver from such a database to a portable information device to allow a caregiver to access assigned tasks.

In some embodiments of De La Huerger, the system includes a pump controller. As noted in De La Huerger, the pump controller is, for instance, a laptop or tablet computer that provides “the physician with a larger display for user interaction than normally available on an IV pump . . . [and] is able to program and monitor the performance of several pumps, giving the worker a single tool to control and review the operation of all the pumps administering IV medication to a patient.” *Id.*, ¶ [0040]. Applicants respectfully submit the controller is not a central information system as recited in claim 1 and 24. The pump controller does not include a data store that contains patient records for a plurality of patients and caregiver data/records for a plurality of caregivers, including assigned tasks for each caregiver.

Close review of the portions of De La Huerger cited in the rejection of claims 1 and 24 in the Office Action dated 2/11/2008 demonstrates that De La Huerger fails to anticipate the claims. For instance, paragraphs [0040]-[0041] and [0101] were cited in the Office Action

for the “central information system” element of claim 1. Applicants respectfully submit that the cited portions do not discuss a central information system as recited by this element. Paragraphs [0040] and [0041] discuss the pump controller. As noted above, the pump controller is, for instance, a laptop or tablet computer that provides “the physician with a larger display for user interaction than normally available on an IV pump . . . [and] is able to program and monitor the performance of sever pumps, giving the worker a single tool to control and review the operation of all the pumps administering IV medication to a patient.” *Id.*, ¶ [0040]. Paragraph [0041] indicates that information from a patient identification device, IV bag, and (in some cases) an IV pump may be transferred to a controller, which determines if the patient indicated in the information from the IV bag matches the identified patient. Applicants respectfully submit that the controller does not comprise a central information system as recited by claim 1. As noted above, the controller does not include a data store that contains patient records for a plurality of patients and caregiver data/records for a plurality of caregivers, including assigned tasks for each caregiver.

Paragraph [0101] discusses memory content for a physician identification device, such as a badge worn by a physician. Applicants respectfully submit that such a physician identification device also does not comprise a central information system as recited by claim 1. In particular, the physician identification device does not include a database that contains a plurality of patient records for a plurality of patients and caregiver data/records for a plurality of caregivers.

Next, the Office Action dated 2/11/2008 cited FIGS. 3 and 4 of De La Hueraga for the following element: “a caregiver identification device including a caregiver identifier associating a caregiver to caregiver data for the caregiver in the central information system, the

caregiver data for the caregiver including assigned tasks for the caregiver.” The cited figures and corresponding discussion in De La Huerga describe a physician identification device. However, Applicants respectfully submit that there is nothing in the figures or corresponding discussion that indicates a caregiver identifier associates a caregiver to caregiver data in the central information system that includes tasks assigned to the caregiver as recited in claim 1.

Finally, the rejection of claim 1 in the Office Action dated 2/11/2008 cited claim 1 of De La Huerga for the element “a portable information device for collecting data from the patient identification device and the caregiver identification device and for communicating with the central information system to access the patient record and the assigned tasks for the caregiver.” However, claim 1 of De La Huerga is directed to associating a medical device with a controller. Applicants respectfully submit that claim 1 of De La Huerga is silent regarding a portable information device that may collect data from a patient identification device and caregiver identification device and that may access a patient record and assigned tasks for a caregiver from a central information system.

For claim 24, the Office Action cites paragraphs [0040]-[0041] and [0101] of De La Huerga for the following element: “receiving current patient related information from the central information system”. As noted above, paragraphs [0040] and [0041] discuss a pump controller and paragraph [0101] discusses the memory content for a physician identification device. For similar reasons as discussed above for claim 1, the cited portion of De La Huerga does not discuss a central information system as recited in claim 24 nor does the cited portion discuss receiving current patient information from a central information system that includes tasks assigned to an identified caregiver.

Referring now to independent claims 12, 36, 45, and 46, each of these claims recite features regarding caching information at a device link server and/or a patient link server. In particular, the device link server and/or patient link server may be used as an offline data store to provide secondary or redundant data storage capabilities to the central information system. *See, e.g., Specification*, ¶¶ [0050], [0053]. Information from the central information system may be cached at the device link server and/or patient link server such that the information is available to a portable information device even when the central information system is unavailable. *See, e.g., id.*, ¶¶ [0052] – [0056]. Additionally, information collected at a portable information device or a medical device may be cached at a device link server and/or patient link server even when the central information system is unavailable, and the information may be communicated from the device link server and/or patient link server to the central information system when the central information system becomes available again. *Id.*

As indicated in the Background of the present application and noted above, the system in De La Huerga is not centrally managed. In particular, the system in De La Huerga does not contemplate a central information system that (1) stores patient-related information and (2) may communicate with a portable information device to transfer information to and receive information from the portable information device other than to verify medication orders. Additionally, the system in De La Huerga does not contemplate using a device link server and/or patient link server to cache information when the central information is unavailable. Instead, the system in De La Huerga stores information on patient identification devices, physician identification devices, and IV devices. *See, e.g., id.*, Abstract; ¶¶ [0030], [0091], [0099], and [0107]. Accordingly, De La Huerga does not anticipate independent claims 12, 36, 45, and 46

because the reference fails to discuss a device link server and/or patient link server that provides caching of information as recited in the claims and as further discussed below.

Referring initially to independent claim 12, the claim recites: “wherein the device link server is available to receive and cache the information regarding actions performed with the identified medical device when the central information system is unavailable and subsequently communicate the information regarding actions performed with the identified medical device when the central information becomes available.” Applicants respectfully submit that De La Huerga fails to describe this feature in conjunction with the other features of claim 12. In particular, De La Huerga does not discuss a device link server that caches information regarding actions performed on a medical device when a central information system is unavailable and then provides the information to the central information system when the central information system becomes available again. The Office Action dated 2/11/2008 cited paragraph [0163] of De La Huerga for this claim limitation. The cited portion of De La Huerga generally discusses providing a visual or audible indication when devices are involved in communication. Applicants respectfully submit that nothing in this cited portion of De La Huerga discusses a device link server as recited in claim 12. Additionally, Applicants could not locate any other discussion in De La Huerga regarding the claimed device link server.

Independent claim 36 recites: “determining that the central information system is unavailable;” “caching the information [from the portable computing device] on the patient link server based on the determination that the central information system is unavailable;” and “when the central information system becomes available again, transferring the information from the patient link server to the central information system.” Applicants respectfully submit that De La Huerga fails to describe these features in conjunction with the other features of claim 36. The

Office Action dated 2/11/2008 cited paragraphs [0094]-[0095] of De La Huerga for the “determining” element noted above. Paragraphs [0094] and [0095] discuss memory for a patient identification device. Applicants respectfully submit that the cited portion is silent with respect to determining a central information system is unavailable. The Office Action dated 2/11/2008 also cited paragraph [0163] of De La Huerga for the “caching” element noted above. As discussed previously, paragraph [0163] discusses providing a visual or audible indication when devices are involved in communication. Applicants respectfully submit that the cited portion does not discuss caching information on a patient link server based on a determination that the central information system is unavailable. The Office Action dated 2/11/2008 further cited paragraphs [0092]-[0098] of De La Huerga for the “transferring” limitation noted above. However, the cited portion generally discusses a patient identification device. Applicants respectfully submit that the cited portion does not discuss transferring information from a patient link server to a central information system when the central information system becomes available again.

Independent claim 45 recites: “a patient link server for caching a patient record and task-related information for the patient from the central information system, wherein the patient record and task-related information for the patient are available from the patient link server when the central information system is unavailable, the patient link server also for caching information regarding actions performed with respect to the patient, wherein the patient link server is operable to cache the information regarding actions performed with respect to the patient when the central information system is unavailable and provide the information to the central information system when the central information system becomes available.” Applicants respectfully submit that De La Huerga fails to describe these features in conjunction with the

other features of claim 45. The Office Action dated 2/11/2008 cited paragraphs [0163], [0102]-[0103], and [0094]-[0095] of De La Huerga for the above-noted features of claim 45. As noted previously, paragraph [0163] discusses providing a visual or audible indication when devices are involved in communication, and paragraphs [0094] and [0095] discuss memory for a patient identification device. Paragraphs [0102]-[0103] generally discuss a physician identification device. Applicants respectfully submit that the cited portions of De La Huerga fail to describe a patient link server that caches patient record and task-related information from a central information system such that the information is available from the patient link server when the central information system is unavailable. Additionally, the cited portions of De La Huerga fail to describe the patient link server also caching information regarding action performed for a patient when the central information system is unavailable and provide the information to the central information when the central information system becomes available again.

Independent claim 46 recites a method that includes: “processing the patient identifier and the patient link server identifier using the portable information device;” “communicating the patient identifier and the patient link server identifier to the central information system;” “associating the patient identifier and the patient link server identifier at the central information system;” “communicating patient-related information for the patient from the central information system to the patient link server;” “caching the patient-related information from the central information system at the patient link server, wherein the patient-related information is available from the patient link server when the central information system is unavailable;” “prompting a caregiver to perform at least one ordered task on the patient in accordance with instructions provided through the portable information, the instructions being obtained on the portable information device from at least one of the central information system

and the patient link server;” and “transferring information pertaining to a performed task from the portable information device to at least one of the patient link server and the central information system, wherein the information pertaining to the performed task is transferred from the portable information device to the patient link server when the central information system is unavailable and is subsequently transferred from the patient link server to the central information system when the central information server becomes available.”

Applicants respectfully submit that De La Huerga fails to describe a method such as that recited by independent claim 46. For instance, the Office Action dated 2/11/2008 cited paragraph [0157] of De La Huerga for the “associating” limitation of claim 46 cited above. Paragraph [0157] of De La Huerga discusses associating a pump with a patient. However, a pump does not comprise a patient link server as that term is used in claim 46. There is also no indication that the information is associated at a central information system as recited in claim 46.

Additionally, the Office Action dated 2/11/2008 cited paragraph [0094]-[0095] for the “caching” element of claim 46. The cited portion of De La Huerga merely discusses memory for a patient identification device and is silent with respect to caching patient-related information from a central information system at a patient link server such that the information is available from the patient link server when the central information system is unavailable.

The Office Action dated 2/11/2008 also cited paragraph [0163] of De La Huerga for the “transferring” element of claim 46. However, as discussed previously, paragraph [0163] discusses providing a visual or audible indication when devices are involved in communication. Applicants respectfully submit that the cited paragraph does not discuss transferring information for a performed task from a portable information device to a central information system if the

central information system is available and to a patient link server for caching if the central information system is unavailable.

As such, it is respectfully submitted that De La Huerga fails to describe, either expressly or inherently, each and every element of independent claims 1, 12, 24, 36, 45 and 46, and, as such, claims 1, 12, 24, 36, 45 and 46 are patentable over De La Huerga. Accordingly, Applicants respectfully request withdrawal of the rejection of independent claims 1, 12, 24, 36, 45, and 46 under 35 U.S.C. § 102(b). Independent claims 1, 12, 24, 36, 45 and 46 are believed to be in condition for allowance and such favorable action is respectfully requested.

Claims 2, 5-7, 9-11, 14, 16, 18-23, 26-30, 32-35, 38, and 40-44 depend directly or indirectly from independent claims 1, 12, 24, and 36. As such, Applicants respectfully request withdrawal of the 35 U.S.C. § 102(b) rejections of these claims as well.

Rejections under 35 U.S.C. § 103

A. Applicable Authority

Title 35 U.S.C. § 103(a) declares, a patent shall not issue when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” The Supreme Court in *Graham v. John Deere* counseled that an obviousness determination is made by identifying: the scope and content of the prior art; the level of ordinary skill in the prior art; the differences between the claimed invention and prior art references; and secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

To support a finding of obviousness, the initial burden is on the Office to apply the framework outlined in *Graham* and to provide some reason, or suggestions or motivations

found either in the prior art references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the prior art reference or to combine prior art reference teachings to produce the claimed invention. *See Application of Bergel*, 292 F. 2d 955, 956-957 (1961). Thus, in order “[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success [in combining the references]. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” *See* MPEP § 2143. Recently, the Supreme Court elaborated, at pages 13-14 of *KSR*, it will be necessary for [the Office] to look at interrelated teachings of multiple [prior art references]; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by [one of] ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the [patent application].” *KSR v. Teleflex*, 127 S. Ct. 1727 (2007).

B. Rejections based on De La Huerga and Engleson

Claims 8, 13, 15, 31, 37 and 39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over De La Huerga in view of U.S. Patent No. 5,781,442 to Engleson et al. (“Engleson”). Applicants respectfully traverse this rejection, as hereinafter set forth.

Claims 8, 13, 15, 31, 37 and 39 are each dependent from one of independent claims 1, 12, 24 and 36, which include limitations not taught or suggested by De La Huerga as described hereinabove. The addition of Engleson does not cure these deficiencies. As such, claims 8, 13, 15, 31, 37, and 39 are patentable over De La Huerga and Engleson, and Applicants

respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claim 8, 13, 15, 31, 37, and 39.

Additionally, Applicants respectfully submit Engleson fails to teach or suggest the limitation for which it was cited. In particular, the Office Action alleges that Engleson discusses the web server/web browser feature of these dependent claims. However, Applicants could not find any mention of a web server and/or a web browser in the portions of Engleson cited in the Office Action.

CONCLUSION

Each of claims 1, 2, 5-16, 18-24, and 26-46 is believed to be in condition for allowance, and a timely notice of allowance is solicited. Should it be determined that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicants' undersigned attorney. No fee is believed due in conjunction with this Amendment. However, if this belief is in error, the Commissioner is hereby authorized to charge any fee which may be required to Deposit Account No. 19-2112.

Respectfully submitted,

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